MTP U Series

UNIVERSAL MTP – MINI TWISTED PAIR RECEIVERS

■ Compatible with MTPX and MTPX Plus Series matrix switchers and all MTP Series transmitters

■ Automatically routes incoming UTP signal to appropriate video, audio, and RS-232 connector

■ Supports RGBHV, RGBS, RGsB, RsGsBs, component video, S-video, and composite video

■ Compatible with HDTV component video, bi-level or tri-level sync

■ Separate variable RGB level and peaking controls

■ Independent skew adjustments for each color – SEQ models only

■ Versatile mounting options

■ External international power supply included

MTP U R A

MTP U R RS

MTP U R RS SEQ

MTP U R RSA SEQ

The MTP U Series Universal Receivers are designed to accept a wide range of video formats, along with RS-232 or audio signals, on a single UTP cable. When used with Extron MTPX and MTPX Plus Series matrix switchers, MTP U Series receivers eliminate the need for multiple receiver units and multiple cables per display, and dramatically reduce the number of matrix switcher outputs required.

Extron Electronics

DESCRIPTION

The Extron **MTP U Series** Universal Mini Twisted Pair Receivers accept a wide variety of video formats along with RS-232 or audio signals on a single UTP cable, providing dramatic cost savings with superior performance in complex twisted pair matrix switching applications. With advanced features, including the ability to automatically route the incoming UTP signal to the appropriate video, audio, and RS-232 output connector, systems require only one receiver, one cable, and one matrix switcher output for each display.

MTP U Series universal receivers are fully compatible with Extron MTPX and MTPX Plus Series Mini Twisted Pair Matrix Switchers and all MTP Series transmitters. The compact units can fit just about anywhere: in equipment racks, under tables, or near a display.

Automatic Signal Format Detection
MTP U Series universal receivers automatically detect the UTP format of the incoming video signal, as well as any incoming audio or RS-232 control signal. The incoming signals are then routed to the appropriate output connectors. Only one video output connector will be active at any time. The other video connectors are muted. This is ideal for applications that use display devices set to auto detect mode.

Next Generation of Twisted Pair Integration
When used together with the Extron MTPX and MTPX Plus Series Mini Twisted Pair Matrix Switchers, MTP U Series universal receivers facilitate system integration and eliminate many of the headaches normally encountered with other twisted pair solutions.

FEATURES

- ■ **Compatible with MTPX and MTPX Plus Series matrix switchers and all MTP Series transmitters**
- ■ **Automatically routes incoming UTP signal to appropriate video, audio, and RS-232 connector**
- ■ **Supports RGBHV, RGBS, RGsB, RsGsBs, component video, S-video, and composite video**
- ■ **Compatible with HDTV component video, bi-level or tri-level sync**
- ■ **Separate variable level and peaking controls**
- ■ **Indepen dent skew adjustments for each color, SEQ models only**
- ■ **Versatile mounting options**
- ■ **External international power supply included**

MODELS

MTP U R A
Universal MTP – Mini Twisted Pair Receiver for Video and Audio

- • UTP input: Accepts video and audio signals
- • Video output: Composite on BNC, S-video on 4-pin mini DIN, component and computer-video on 15-pin HD

MTP U R RS
Universal MTP – Mini Twisted Pair Receiver for Video and RS-232

- • UTP input: Accepts video and bidirectional RS-232 control signals
- • Video output: Composite on BNC, S-video on 4-pin mini DIN, component and computer-video on 15-pin HD

MTP U R RS SEQ
Universal MTP – Mini Twisted Pair Receiver for Video and RS-232 with Skew Equalization

- • UTP input: Accepts video and RS-232 control signals
- • Video output: Composite on BNC, S-video on 4-pin mini DIN, component and computer-video on 15-pin HD
- • Independent skew equalization for each color

MTP U R RSA SEQ
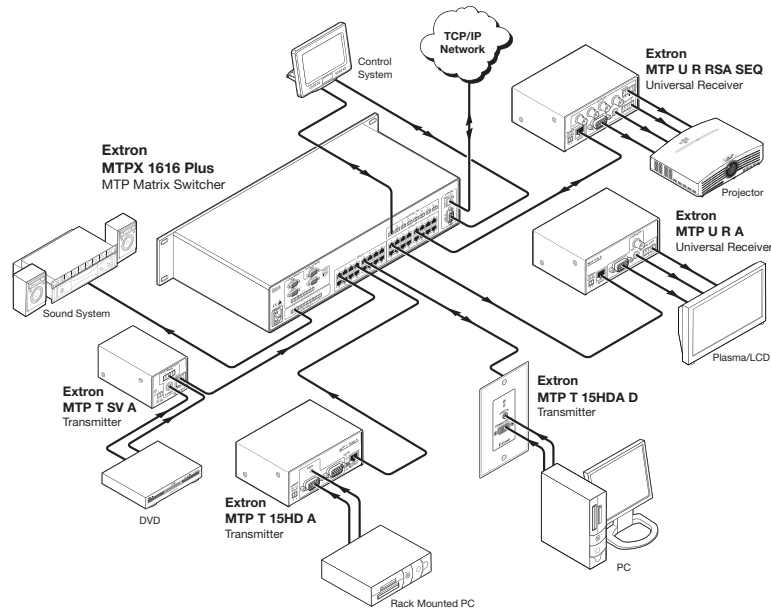**Universal MTP – Mini Twisted Pair Receiver for Video, Audio, and RS-232 with Skew Equalization**

- • UTP input: Accepts video with audio or video with bidirectional RS-232 control signals
- • Video output: Composite on BNC, S-video on 4-pin mini DIN, component on three BNCs, and computer-video on 15-pin HD
- • Independent skew equalization for each color

VIDEO

Gain .... Unity

VIDEO INPUT

Number/signal type .... 1 set of proprietary analog signals
Connectors .... 1 female RJ-45

VIDEO OUTPUT

Number/signal type .... 1 RGBHV, RGBS, component video (bi-level and tri-level), S-video, composite video (follows input type)
Connectors
  MTP U R RSA SEQ .... 1 female 15-pin HD for RGB
3 BNC female for Y, R-Y, B-Y
(1) 4-pin mini DIN for S-video (Y/C)
1 BNC female for composite video
  All other models........................... 1 female 15-pin HD for RGB or Y, R-Y, B-Y
(1) 4-pin mini DIN for S-video (Y/C)
1 BNC female for composite video
Nominal level................................. 1 Vp-p for Y of component video and S-video, and for composite video
0.7 Vp-p for RGB and for R-Y and B-Y of component video
0.3 Vp-p for C of S-video
Minimum/maximum levels.............. 0.8 V to 1.2 Vp-p
Impedance .... 75 ohms (during video output only)
Return loss .... <-30 dB @ 5 MHz (during video output only)
DC offset .... <±20 mV with input at 0 offset

SYNC

Output type.................................... RGBHV, RGBS
Standards....................................... NTSC 3.58, NTSC 4.43, PAL, SECAM
Output level .... 4.0 V to 5.0 Vp-p, unterminated
Output impedance .... 87 ohms (24 mA)
Polarity.. Positive or negative (selectable)

AUDIO – MTP U R RSA SEQ, MTP U R A

Gain .... Unbalanced output: 0 dB;
balanced output: +6 dB
Frequency response .... 20 Hz to 20 kHz, ±1 dB (for DC coupling, with jumpers 4 and 5 installed)
THD + Noise .... 0.15% @ 1 kHz, 0.3% @ 20 kHz at nominal level
S/N .... >70 dB at maximum output (unweighted)

AUDIO INPUT – MTP U R RSA SEQ, MTP U R A

See MTP Series transmitters' audio output specifications

Number/signal type .... 1 set of proprietary analog signals
Connectors .... 1 female RJ-45
NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

AUDIO OUTPUT – MTP U R RSA SEQ, MTP U R A

Number/signal type .... 2 mono, balanced/unbalanced
Connectors .... (1) 3.5 mm captive screw connector, 5 pole
Impedance .... 50 ohms unbalanced, 100 ohms balanced
Gain error .... ±1 dB channel to channel

CONTROL/REMOTE – EXTERNAL DEVICE

Pass-through, unidirectional or bidirectional
(MTP U R RSA SEQ, MTP U R RS SEQ or MTP U R RS)

Serial control port input/output ...... RS-232 via (1) 3.5 mm, 3 pole captive screw connector
NOTE: The serial communications link of an MTP U R RSA SEQ, MTP U R RS SEQ or MTP U R RS is unidirectional only, transmitter to receiver, unless the receiver's internal switch has been set.
Baud rates .... Up to 38400 bps at up to 500' (152 m) (Higher data rates and distances are possible. Performance will vary based on baud rate and cable length.)
Protocol .... Data bits = 5 - 8
Stop bits = 1 or 2
Parity = odd, even, none
Flow control = XON, XOFF, none
NOTE: Protocol is mirrored between the transmitter and the receiver.

Serial control pin configurations...... Captive screw connectors: 1 = TX, 2 = RX, 3 = GND

GENERAL

External power supply..................... 100 VAC to 240 VAC, 50/60 Hz, external, universal; to 12 VDC, 2 A, regulated
Power input requirements............... 12 VDC, 0.5 A
Temperature/humidity .... Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing
Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling.. Convection, unvented
Rack mount.................................... Yes, with optional 1U rack shelf, part #60-190-01 or 60-604-01; or VersaTools® rack shelf, part #60-190-20 or 60-604-20
Also furniture mountable with optional Mini Under-Desk Mounting Kit, part #70-212-01; or projector mountable with optional projector mounting kit, part #70-217-01
Enclosure type .... Metal
Enclosure dimensions .... 1.7" H x 4.3" W x 3.0" D (1U high, quarter rack wide)
4.3 cm H x 10.9 cm W x 7.6 cm D (Depth excludes connectors.)
Product weight .... 0.6 lbs (0.3 kg)
Shipping weight .... 2 lbs (1 kg)
Vibration .... ISTA 1A in carton (International Safe Transit Association)
Listings.. UL, CUL
Compliances .... CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF .... 30,000 hours
Warranty .... 3 years parts and labor
NOTE: All nominal levels are at ±10%.

Model	Version Description	Part Number
MTP U R RSA SEQ	A/V & RS-232 Universal Receiver w/SEQ	60-869-01
MTP U R RS SEQ	Video & RS-232 Universal Receiver w/SEQ	60-869-02
MTP U R A	Video & Audio Universal Receiver	60-869-03
MTP U R RS	Video + RS-232 Universal Receiver	60-869-04

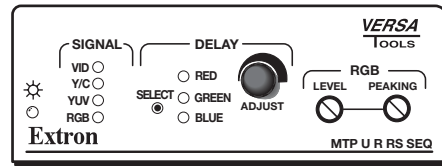**Specifications are subject to change without notice.**
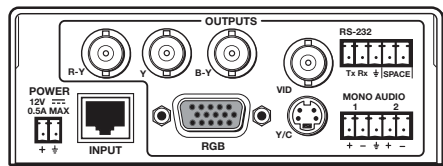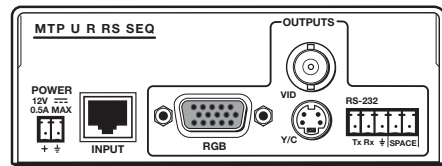
APPLICATION DIAGRAM

PANEL DRAWINGS
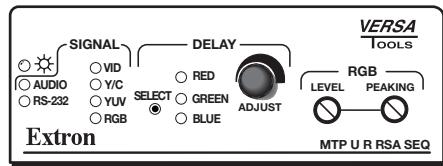
MTP U R RSA SEQ - Front

MTP U R RS SEQ - Front

MTP U R RSA SEQ - Back

MTP U R RS SEQ - Back

MTP U R A - Front

MTP U R RS - Front
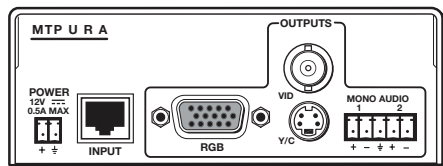
MTP U R A - Back

MTP U R RS - Back

07-10
68-1399-01
REV. B